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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/729,171	12/05/2000	Akio Ikeda	0229-0621P	6594

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EXAMINER	
FISCHER, JUSTIN R	
ART UNIT	**PAPER NUMBER**
1733	8

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/729,171	Applicant(s) IKEDA, AKIO	
	Examiner Justin R Fischer	Art Unit 1733	

-- Th MAILING DATE of this communication appears on th cov r sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4 and 6-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4 and 6-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 2, 9, and 10 are cancelled per Amendment C on May 23, 2003.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori (JP 02088310, of record) and optionally in view of Tsukada (JP 05178013) and Takehara (JP 60-128006). As best depicted in Figure 1, Mori discloses a pneumatic tire construction having a tread portion, a pair of sidewall portions, and a pair of bead portions each with a bead core and a bead apex, wherein the lower sidewall region of each of said sidewall portions contains a vent emboss line (spews formed by rubber flow into vent hole) and a corresponding vent groove or protrusion, such that the height of the protrusion (analogous to groove depth) is between 0.30 and 2.0 millimeters. It is further noted that the height of the protrusion in Mori is also analogous to the protruding height or height from the straight profile of the claimed invention (suggested as between 0.30 and 2.0 millimeters). Furthermore, as depicted in Figure 1, the lower sidewall region has a "substantially straight" profile as required by the claimed invention. Regarding the width of the vent groove, Mori suggests a distance of greater than 1 millimeter. While the reference fails to expressly describe the claimed range of 5

to 10 millimeters for the width of the vent groove, one of ordinary skill in the art at the time of the invention would have found it obvious in view of the "greater than 1 mm" range suggested by Mori and depending on the desired function of the vent groove (e.g. lettering, indicia). It is emphasized that Mori does suggest a spacing or vent groove width greater than 1 millimeter, in which case all of the values defined by the claimed invention are within the scope of the tire of Mori, there being no conclusive showing of unexpected results to establish a criticality for the claimed vent groove width. Lastly, with respect to the language "...having a positive extent is left on the radially outside of said vent groove and the radially inside of said vent emboss line" (claim 1, lines 22 and 23), it is unclear if such language is requiring the vent groove to be inward of the straight profile of the tire and the vent emboss line to extend outward of the straight profile (expressly disclosed/depicted by Mori). If such is the case, Tsukada (Figures 1 and 2) and Takehara (Figures 1 and 2) are applied to evidence that such a sidewall construction is well known in the tire industry, particularly that a groove can be disposed within the sidewall limit or straight profile as opposed to being in line with the straight profile, and one of ordinary skill in the art at the time of the invention would have found it obvious to include such a construction in the tire of Mori. It is noted that in each of these instances (Tsukada and Takehara), the vent emboss line forms a protruding portion outside of the straight profile in combination with the vent groove being arranged inward of the straight profile, as required by the claimed invention.

As per claim 6, Mori describes the vent emboss line/vent groove assembly as being in the rim cushion region or lower sidewall region. As depicted in Figure 1, this

region "m" is defined as radially extending between the rim flange height and the height of the bead apex, thereby incorporating a significant portion of the claimed range. It is also noted that a placement slightly above the height of the bead apex would have been obvious to one of ordinary skill in the art at the time of the invention.

With respect to claims 7 and 8, as previously stated, Mori discloses the inclusion of vent holes in the lower sidewall region (entire extent), specifically between the rim flange height and the bead apex height. Thus, Mori is directed to the placement of said vent holes in the radially outer edge of the lower sidewall region. While Mori fails to expressly depict these embodiments, it would have been within the purview of one of ordinary skill in the art at the time of the invention to place said vent holes in accordance to the desired positioning of the associated sprews and vent groove. For example, if the vent groove is displaying an indicia or some additional lettering, one of ordinary skill in the art at the time of the invention might place said vent holes at the radially outer end of the lower sidewall region in order to optimize visibility.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori, Tsukada, and Takehara as applied to claim 1 above and further in view of Endo (JP 06055915, of record). Mori discloses a pneumatic tire construction having a tread portion, a pair of sidewall portions, and a pair of bead portions each with a bead core and a bead apex, wherein the lower region of each of said sidewall portions contain a vent emboss line (spews formed by rubber flow into vent hole) and a corresponding vent groove or protrusion, such that the height of the protrusion (analogous to groove depth) is between 0.30 and 2.0 millimeters. While the reference fails to expressly depict

the inclusion of lettering of indicia (emboss marks) in the vent groove, it is well known and conventional to place emboss marks in a sidewall groove, as evidenced by Endo (Abstract and Figures 1 and 2). As such, one of ordinary skill in the art at the time of the invention would have found it obvious to include emboss marks in the groove or Mori, it being emphasized that the vent groove has a width of greater than 1 millimeter that can accommodate a wide variety of emboss marks, including lettering, indicia, and additional, well known designs.

Response to Arguments

5. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that the prior art references of record fail to suggest the claimed vent groove width and vent groove depth, particularly between 5 and 10 millimeters and between 0.15 and 0.50 millimeters, respectively.

As set forth in the rejection above, Mori suggests a vent groove width (analogous to spacing of sprews) greater than 1 millimeter, which incorporates the entire range of the claimed invention. It would have been within the purview of one of ordinary skill in the art at the time of the invention to select a vent groove width between 5 and 10 millimeters in view of the range disclosed by Mori (greater than 1 mm) and further in view of the desired function of the vent assembly (e.g. lettering, indicia). It is further noted that the spacing of the respective sprews (which defines vent groove width) is a function of the sidewall height and thus a function of the specific type of tire being manufactured. Therefore, one of ordinary skill in the art at the time of the invention

would have found it obvious to provide a vent groove having a width between 5 and 10 millimeters, there being no conclusive showing of unexpected results to establish a criticality for the claimed vent groove width.

Regarding the vent groove depth, Mori suggests that the protrusions or vent emboss lines have a height of between 0.3 and 2.0 millimeters, which incorporates over half of the range disclosed by the claimed invention. In this instance, the emboss line height is analogous to the depth of the vent groove. The specific selection of an assembly having a depth of between 0.15 and 0.5 millimeters would have been obvious in view of the range disclosed by Mori and further in view of the specific function of the vent assembly (e.g. required depth of lettering or indicia). While applicant asserts a benefit for this claimed range (and that for the vent groove width), the ranges of the claimed invention would have been obvious in view of tire construction described by Mori.

In summary, the claimed invention as amended requires the following three features: a vent groove width between 5 and 10 mm, a vent groove depth between 0.15 and 0.5 millimeters, and a protruding height (from the straight profile) between 0.3 and 2.5 millimeters. Mori discloses a vent groove width of greater than 1 millimeter, a vent groove depth between 0.3 and 2.5 millimeters, and a protruding height (from the straight profile) between 0.3 and 2.5 millimeters. In this instance, the bottom of the vent groove represents the straight profile, such that a protrusion height of between 0.3 and 2.5 mm is analogous to a protruding height from the straight profile in accordance to the claimed invention. Also, as stated above, if applicant intends the language "...having a positive

extent is left on the radially outside of said vent groove and the radially inside of said vent emboss line" to require the vent groove to be inward of the straight profile of the tire and the vent emboss line to extend outward of the straight profile, Tsukada and Takehara are optionally applied to evidence that tire sidewalls are commonly formed by disposing the groove inward of the tire straight profile (Mori already discloses protrusion of vent emboss line outward of straight profile).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(703) 605-4397**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Justin Fischer

August 7, 2003

Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700